

REMARKS

The Application presently includes claims 1-33. Claims 1, 2, 4, 6, and 8-10 were rejected by the Examiner under 35 U.S.C. §102(b) as being anticipated by Cheon, U.S. Patent No. 5,731,954 ("Cheon '954"). Claims 11-14, 17-20, 22, 24-27, and 30-33 were also rejected by the Examiner as being anticipated by Cheon '954 under 35 U.S.C. §102(b). No new matter has been added. Applicant respectfully traverses the rejections, and requests that the Examiner withdraw the objections and rejections and pass the application to allowance. The present amendment of Claim 9 is for the purpose of correcting a typographical error, and not for any reason related to patentability. The previous arguments in the last amendment not previously considered by the examiner are reiterated below.

Examiner Interview:

During a telephonic interview with the Examiner on July 2, 2003, the Examiner drew a distinction between the terms "bondable" and "bonded," as used in claims 1 and 11, and indicated that the application would be reconsidered if an amendment were made to indicate that the elements are "bonded" rather than "bondable." As such, an amendment to this effect has been made to claims 1 and 11. Applicant thanks the Examiner for the courtesies extended during the telephonic interview, and requests that the rejections of the claims be reconsidered in view of this amendment and the following remarks.

Claim Rejections and Amendment:

Applicant has amended independent claims 1 and 11 to indicate that the heat radiating plate and heat radiating pipe are “bonded” to one another. Support for this amendment is found, *inter alia*, according to the description, page 4, lines 14-16, page 5, lines 1-3, page 6, lines 19-21, page 7; lines 6-7 and 23-25, page 10, lines 12-14 and page 11, lines 3-4; claims 9, 24, 26, 31, 32, and figure 1. Applicant submits that the references of record do not disclose, teach, or suggest this limitation.

In addition, concerning the comments of rejection of claims 1-2, 4, 6, 8-10 and claims 11-14, 17-20, 22, 24-27, 30-33 under 35 USC §102:

1. The amended claims 1 and 11 have at least the following distinguishable features over the Cheon patent:

1) In the application document of this patent, a heat radiating pipe 2 is directly bonded to a heat radiating plate 3; while in the Cheon patent (see figures 1-2 and 5, the description, page 4, lines 49-61, page 5, lines 14-26, page 7, lines 36-39), the passage 66 is indirectly bonded to the Pelitier effect cooling module 46, without a bonding structure to the radiator 42.

2) The heat radiating pipe 2 in the application of this patent is a mere structure transferring heat to the heat radiating plate 3 (see page 7, line 23), and dissipates heat to the outside, and conducts heat to the heat radiating plate 3 via the bonding structure of the heat radiating pipe 2 and the heat radiating plate 3, while in the Cheon patent, the passage 66 is merely a path for communicating the upstream portion 58 and the downstream portion 60, and does not dissipate heat to the outside, nor does it act to transfer heat to the

radiator 42, so it is not equal to the radiating pipe. Thus, the heat radiating pipe 2 in this patent is a completely different structure from the passage in the Cheon patent.

3) The heat-radiating plate in the Cheon patent as shown in figure 1 is mounted to the housing 7, rather than to the outer surface of a sidewall of the chassis. As shown in figures 1 and 4, and described in the description on page 3, lines 20~30, the housing 7 is a power supply housing rather than a computer housing, and it is quite different from the microcomputer chassis 9 mentioned in the application of this patent. There is a world of difference in structural design between the liquid heating dissipation system disposed on the computer housing and that disposed on the power supply housing. If the liquid dissipation system is disposed on the power supply housing, the pump, water tank and pipe of the dissipation system are supported by the power housing, such a design can in no way expand the area of dissipation system, and its implementing effect can only meet the heat dissipation requirement for early computers (586 period). For the CPU of the present P4 period, the heat of 70W demands a heat dissipation board of larger area. In this application, it is an operable technical solution to dispose the heat dissipation system on the computer housing. Thus, the feature "heat-radiating plate disposed on the outer wall surface of the chassis" in claim 1 of this application has not been disclosed by Cheon patent.

2. The heat dissipation mechanism of this patent is different from Cheon's:

In Cheon patent, Pelitier effect cooling module 46 is a semiconductor cooling device.

When a voltage is applied on the semiconductor cooling device, a temperature difference will be generated on the two sides of the device, one becoming hot and the other cold. The Cheon patent achieves its purpose of temperature reduction for computers with this effect. The heat dissipation system disclosed in Cheon's patent is actually a combination of a liquid heat conducting system and a semiconductor cooling heat dissipation system, and this is a computer heat dissipation solution having a cooling effect, while the heat dissipating mechanism of this patent is quite different. In this patent, the heat generated by the computer is dissipated by structure of the heat radiating pipe 2 and heat radiating plate 3, and its heat dissipation mechanism is as simple as the household radiator.

3. Based on the differences of points 1 and 2, the technical solution defined in claims 1 and 11 of this patent has not been disclosed in Cheon patent, and hence is neither disclosed, taught, nor suggested by the Cheon patent.

4. Since claims 2, 4, 6, 8-10 are dependent claims of independent claim 1, they all have the technical features of claim 1. Thus, these claims are also not disclosed, taught, or suggested by Cheon. Likewise, claim 11 being patentable over Cheon, its dependent claims 12-20, 22, 24-28, 30-33 are also neither disclosed, taught, nor suggested by Cheon.

5. In addition, for the heat dissipation of power supply, the Cheon patent intends to use a heat conducting board crossing over two groups of power transistors having high and low voltages, which, in fact, is a technical solution that cannot be carried out. The power supplier has a high voltage part of higher than kilovolts and a low voltage of only 5 volts, 12 volts; the use of a heat conducting board will result in a voltage breakdown. Furthermore, the technical solution

that the liquid circulating system is disposed on the power supply housing can in no way be accepted by the technical security departments of many countries (USA in particular), such patent product cannot be implemented.

Conclusion

In view of the above Amendments and Remarks, Applicant submits that the present application is in condition for allowance, and seeks early indication of the same. If the Examiner requires further information with respect to this application, the Examiner is invited to contact Applicant's attorney at (847) 537-3537 for a telephonic interview.

Respectfully submitted,

Date: November 17, 2003

By: Marc D. Machtinger

Marc D. Machtinger, Reg. No. 43,434
Law Office of Marc D. Machtinger, Ltd.
750 W. Lake Cook Road, Suite 350
Buffalo Grove, Illinois 60089
Phone: (847) 537-3537
Attorney for Applicant
Customer No. 30358

CERTIFICATE OF MAILING (37 C.F.R. § 1.8a)

I hereby certify that this correspondence is, on the date shown below, being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450 on November 17, 2003 by:

Margaret A. Swindal
Margaret A. Swindal